

ANT/PIE/G1

P. PETERS

0037

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Subject

	Qtz	Qtz Fld etc (mica)	Fld	Qtz Kfs Hbl Hy	Qtz Kfs Hbl Hy	Hypersthene-bearing	Mafic Rocks	Other
MB Katz	Qtz Fld	Qtz Fld etc (mica)	Fld	Qtz Kfs Hbl Hy	Qtz Kfs Hbl Hy	Hypersthene-bearing	Pla Hbl Px	Pla Hbl Px
Isotropic Massive Granulite	Alaskite	Granulite	Syenite	Charn.	Manger.	Enders.	Pyri- Amphib.	Amphib.
Platy Granulite	Alask.	Gneiss	Syen.	Ch.	Mang.	End.	Pyri- Amphib.	Amphib.
Anastom- Anisotropic Augen	Alask.	Granulite	X	Ch.	Mang.	End.	Pyri- Amphib.	Amphib.
Flaser	Alask.	Granulite	X	Ch.	Mang.	End.	Pyri- Amphib.	Amphib.
Tilly	Alask.	Granulite	X	Ch.	Mang.	End.	Pyri- Amphib.	Amphib.

Communication Facilities

<u>Service</u>	<u>Location</u>	<u>Freq. available</u>	<u>Emission</u>
Field parties Liaison	Kinuckey Peaks	(a) 8110 KHz	SSB
	Mawson	(b) 5400 "	"
	Davis	(c) 4040 "	"
	Nella Dam	(d) 2720 "	"
Field parties	Base - Kinuckey Peaks	(a) 4040 "	"
	Field Stations	(b) <u>2720</u> "	"

Radio Callsigns

<u>Station</u>	<u>Voice</u>	<u>Morse CW</u>
Kinuckey Peaks	Kinuckey Peaks	VLV2
Mawson	Mawson	VLV
Davis	Davis	VLZ
Field parties	Survey one, two, three	SP1, SP2, SP3
Aircraft	Last 3 letters	
Ship	Nella Dam	OZVK.

Radio report

- ① Met rep ② status report on work & equipment
- ③ medical report if applicable.

Radio Schedules

GMT Local MBT

0045	0645
0530	1130
1130	1730
1730	2330

a	alpha
b	Bravo
c	charlie
d	DELTA
e	Echo
f	FOXTROT
g	golf
h	HOTEL
i	INDIA
j	JULIET
k	KILO
l	LIMA
m	MIKE
n	NOVEMBER
o	OSCAR
p	PAPA
q	QUEBEC
r	ROMEO
s	SIERRA
t	TANGO
u	UNIFORM
v	victor
w	WHISKEY
x	XRAY
y	Yankee
z	zebra

Wednesday 24 12 1974

Clear weather, Sunshine

Left Hella Dan 17 30 hrs. helicopter developed
crankles. returned to Hella Dan and departed
again 18.15 hrs. Flew to Alphonse I.,
however our triangulation point & proceeded
to Rayner Peak. Set up tent ~~to~~ m from
triangulation point.

PC 1-18 Hella Dan, pack ice / ice shelf
, Hella Dan / pack ice / open sea, coastal
area Edward VII Bay - glacier,
Alphonse I., glacier, Rayner Pk. as
distance. PC 14-18 NW side of
Rayner with layered dipping NNW from
and S, SW side of Rayner.

A Ph. K.E. ice shelf - Rayner Ph R7
8136 V

Wednesday 25.12.1974

PC 18219 Rayner pk

but 21 SW behind reach point K

Molucca 135-315 M trend of

jointly widely spread.

laying of beds $85^{\circ}/_{30}$ M

Storage

MW ~~theater~~ double peaks: see Aph. Cape
Gottley, Schwartz Ra.
160/40-45 M Rq. No. 135R (15)

PC 20 NE spur below

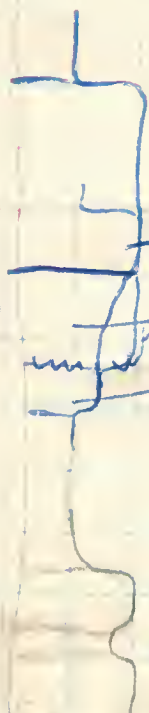
Yakima zone joint 140 trend M \perp
(see PC 18219) and 255-75 M trend \perp

PC 21 SW spur from 2nd main peak

photograph of following section only

Rayner part

PC 28829 & 30.



Garn. granulite (biot)

Sample 0014 G & feldsp rich layers
& garnet coarse.

Transition between granulite & pyroxenite.

Sample 0011 → layering ^ foliation.
some foliation recumbent & flat (thin & planar)
Gx. planes sub // layering.

pyroxenite
Sample 0012 & 0013

Granulite

brown, dark feldsp. pyrox. rich (pyrox. f. ?)

Wh. in massive g. w. garnet
in 10' deep to central rocks. Layering
bottom layer plane 10' deep M
concentric (Tertiary) //

main layering
Sample 0001

350m

(P1) Section along spar ~~SW~~ SW of
second main peak. Started from below where
snow stops in col.

Well layered sequence of light coloured to
whitish granulate with garnet & mica
and dark brown to almost black feldsp, mica
pyroxene (^{pyroxene} ~~chromite~~?) rock. Contacts of layers
are abrupt or transitional. ~~with~~ Transitional
contacts show both rock types finer interlayered.
Layering seems to be consistent over long
distance (100m and over). At main peaks
~~the~~ crude layering persistent over several
100 metres. The dark rocks weathers easily
and a little and shows often ferruginous
coloring. In light ~~chromite~~ granulate locally
fine layering (compositional) // main layering.
The @ rocks (or plates) are // aligned
sometimes showing lineation. The layering
seems to be consistent oriented over whole
of Rayner: ⁴⁵100 - ⁸⁵140 / 15-45 M.

Sample	0001	o/c garn. granulate.
Sample	0011	transitional layering / foliation clear.
Sample B1	lichen	
Sample	0012 - 0013	pyroxenite

(P₂) layer of 4cm thick very dark
to black felsic pyroxene rock (^{pyroxenite} ~~charnock~~)
same as at P₁ but less weathered
Also ~~interlayered~~ ^{interlayered with} lighter colored
granulite.

Sample 0002

Rock shows fine fracturing (cleavage?)
spacing approx. 3-5 mm.

Thursday 26.12.1974 APh a/b

(P₃) near camp place
2, felsic pyrox (biot) rock (charnock)
interlayered with biot. pyroxenite ^{felsic} (felsic)
charnock is relative hard, while pyroxenite
weathers easily to Fe-oxide, crumbly
rock. layers 50 cm - 250 cm thick.
also fine (1-4mm) cleavage fracturing,
which appears to cut through grains.
Probably in fault, because rocks are
shattered. Main joint system trends
150° and is \perp

Sample 0003 Charnock.

Sample 0004
layering: 120/20-15M

biot. pyrox. ^{clastic} ~~pyroxenite~~

At triangulation point between pyrox.
and charnockite is a lens of shrd,
fractured, shattered and alaskite.
lens about 6 m along strike and
max. ~~20~~²⁰⁰ m thickness

Sample 0005 alaskite

Just S of camping place, along spur
the pyrox. is also inter^{layered} ~~bedded~~ with
a ~~finely~~ ^{banded} ~~layered~~ ^{micro} fractured (cleavage!)
granulite with layering of Qtz & feldspar rich
layers, and a garn. gneiss ^{mass}
with the garnet concentr. in zones ^{layering}.
Garnet is reddish and has reddish stains
in surrounding rock.

Sample 0006 banded granulite.

Sample 0007 garn. granulite

Sample 0008 ^{iclastic} ~~pyroxenite~~

Sample 0009 float. Q + coarse garn + pyrox.



(P4) 2nd ^{not} small col of main col
thick sequence of massive red
to pinkish (weathering colour) ~~the~~ Pyrox, Garnet
Feldsp, & granulite

Garnet is reddish and occurs in clusters

Q is usually platy. Both oriented
~~roughly // layering~~
~~strongly foliated to lineation trending 125° M.~~
~~layering 125/25.30 M.~~

giving rise to not continuous ^{crude} foliation

roughly // layering.

layering 125/25.30 M: foliation 35°/15 M.

P C 26 foliation in dip direction

P C 27 Leche Ra from Rayner

Sample 010 white out
granulite

This rock type seems to be particularly
good substrate for lichens. The rocks
are facing to N and have many little
potholes with standing water in which
much growth occurs.

Sample B2 lichens.

(P5) 1st small col. SW of main col.

thick beds of (100-200 cm) of ~~metre~~^{beds}.

gneiss interlayered with pyroxenite.

gneiss shows some folding, recumbent with ax. planes sub// layering.

some lenses of coarse (1-2') feldspar & some q. Sample 0015 gneiss.

about 20 metres further SW (thus upward again) occurs rock type of (P4). Here the dark rock also cuts through the light color. meta.

(P6) morphics (dike about 200 cm thick)
(P6) 3rd small col. SW of main col.

garnet alaskite again interlayered with pyroxenite

Sample 0016

Bob took 2 photographs with telephoto lens of Ranger peak where a thick dike is exposed. The Nos are 23 & 24.

Friday 27.12.74

A1h a/b

(P7) of garnet granulite (alaskite)
light grey when fresh, but in c/c the
rock has usually a ^{thin} ~~yellow~~ ^{pinkish} tinge of
mottled Q (+ some feldspar and garnet)
of a ~~brownish~~ very light grey to whitish
colour with red to brown ^{pinkish} staining.

P(31,32) from top to bottom

- a 40 cm thick garnet granulite
medium gr. with fine (min's) internal
layering // main layering. garnet ^{grains} random
- b 6-10 cm thick coarse garnet granulite
with Q plates which are slightly steeper
than main layering. (approx. 30°) coarse garnet up to
1 cm diam. garnet grains random
- c 8 cm thick garn. granulite as (a)
- d 8 cm " " " with
garnet concentr. in thin zones //
main layering. and also very thin
zones with fine c/c mineral, possibly an
amphibole.

Sample 0017

(d) check on c/c
mineral

Sample 0018

garnet granulite with
lower c.f. orient. Q plates

main layering garn. granulite ³⁵
total thickness approx. 8m. 90/20-30 M.

The ^{granulite} sequence is intruded, sills and
dikes by dark colored, Fe stained, coarse
crumbly rock which easily weathers.

The rock consists of fine gr. amphibole
(more prob. than pyrox.) greenish feldspar,
reddish Q, some mica, probably
metadiorite.

Sample 0019 metadiorite.

(P0) old garnet granulite
garnet concentrate in thin zones
sub// main layering.

P32 garn. granul. with crossbedding
and cut-and-fill structures??!

also some foliated material, ax. plane
sub// layering.

P33 garn. granul. foliated ax. plane ^(sub)// layering.
granulite intruded by metadiorite.

34 snow overhang & wind gully in
snow SW end of Rayner.

RIPPON DEPOT.

Saturday 20.12.1974

(Pg) PD 1 & 2 Approach of Rippon Cl.
depot from Rayner (S)

PD 6 & 7 looking S to Rayner

etc from which I took samples (Pg)

PD 10 & 11 Folded, dated thin
dyke in charnockite

dykes trend around 180 M

and are approx. vertical.

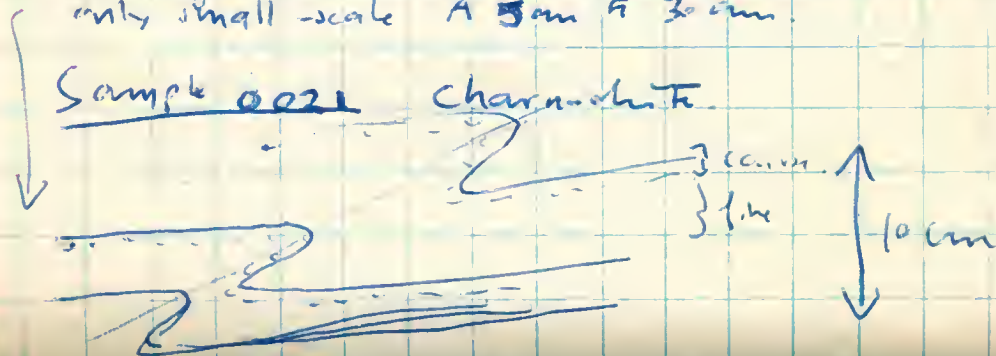
Sample 0020 dyke. metadolerite

foliated
Pl 13 & 14 layers in charnockite
probably ~~met~~ dk. brown coloured
rock is metadolerite.

layers 265/80-85 M.

Folding is clinal, recumbent to a-sym.
only small scale A 5 cm to 3 cm.

Sample 0021 charnockite



At N. side of o/c (P.D. 6 & 7)
dips change from $250/85^{\circ}$ ¹⁹⁵ M at W
to 215

to $270/85^{\circ}$ M at E.

At W. part occur same thin coarse (2-4 mm) (2 cm thick)
Q veins which cut across the
laminae. Laminae is usually fine
and determined by c/s (1 mm) and
finer γ min charnockite, and by
difference in composition more or
less Fe my minerals versus $\pm 30\%$ Fe my
minerals.

The rocks are rounded by
abrasional working of ice but no
marks. Exfoliation weathering.

PD 16 bedded foliated charnockite
Thin layers of grey, glassy Q and
thicker layers of brownish rock
with Fe my minerals (Fe staining)
Actually most rocks seem to be
evenly folded in small rock.

Bird Ridge 50/45-50 M

PD 18 Aker from Mueller

PD 19-20 N. side of Aker ^{clay} Brownish
massively layered red dip ^{approx 90} 145/6 M

PD 21 ~~Hard~~ Steep, Mueller
& Mt Cook (back) from Aker
dip slope Steep: 170/40-45 M
" Mueller 80/40-60 M.

~~Saturday~~

Sunday 29.12.1974

AKER PEAKS

(Pic) Aker Magnet Bay to Scott R
& 101, 9071 R.

PD 22 looking 285° M to Birds Edge
(more accurately) dip 10/60 M. Similar dip at
Bird R but looks steeper.

Samples 0222 charman.

23

"

24

+ vein.

Rocks of main Aker peaks &
surrounding rocks look the same.

Saturday 4.1.1975 NEWMAN NTKS

PD 28' to top 290 T to Mt
Bennet (big chunk, one at back, and
and Mt Condrington)

Elkins {
spiky
twiggy
Grass-like
Mud Bonnet
mossy f. chunky

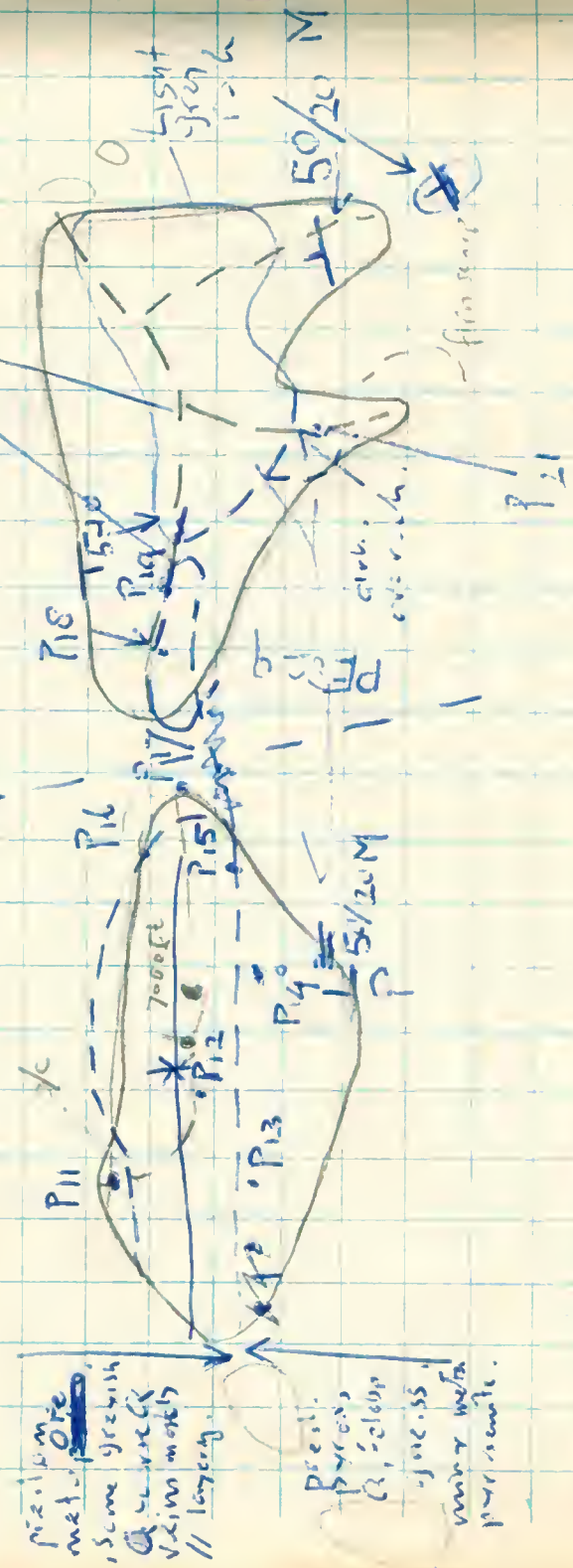
The spiky peaks show strong vertical zoning or fracturing ~~or layering~~ ^{clear} (I couldn't see any ~~clear~~ layering through binoculars.)

Part A of Pieters Mt. is on top covered ~~in~~ with angular scree (very persistently) with bldgs from a few cm to about 50 cm. From E the mt looks flat on top, and on top it is smoothly undulating with steep cliffs at all sides except where A pines are in B. The gravel appears to concentrate in roughly ~~irregular~~ ^{to irregular} circular hillocks between which small ~~irregular~~ ^{irregular} hillocks diam. 2 to 5 m. height difference 40 cm to 80 cm.

T5-10

Mnt. A H Mnt. B

Fault?



pyro. ore
met. ore
some greenish
blue
thin matrix
// layering

pyro.
R, felsic
fine ss.
matrix with
pyroclastic

(P11) See sketch map

short spur pointing N.

blackish, brownish Fe-ore rock overlying
pyrox, Q, feldsp. gneiss.

Only seen through binoculars, both rock types
have massive appearance

layering. 255/15 M.

1 prominent fracture 300/40 M

(P12) W/L 20 mtr. N & NW of tent. at foot of
summit spur.

Q - Fe ore rock; almost granoblastic

Layering caused by thin bands & lenses of
greyish Q and layers of Fe ore. Parallel
to this the rock is fracture layered from
massive (see P11) to a few cm thick.

Q bands/lenses ~~by~~ 2mm to 15cm thick
ore ~~lenses~~ layers 2mm to 7cm thick.

Fe ore makes up bulk of rock.

Rock is heavy, ~~but does not~~

~~it~~ affects compass needle, so probably
~~has~~ magnetic (almost perpendicular
cleavage planes.)

Blackish to reddish (brown) weathering

most prominent jntng at c/c 025/85 M

PD 30 & 31 o/c note jntng.

Layering ³⁵⁵ 50/10-20 M.

Sample 0025 crse granoblastic Fe ore

banded by 2 fracture planes // layering

Sample 0026 massive ^{medium} fine gr. ? Fe ore.

+ Q layer.

On some weathering surfaces pitting // layering. Cause?

(P13) o/c pyrox., Q, Feldsp. gneiss
pyroxene concentr. in thin laminae
or in irregular clusters.

medium gray to whitish rock.

It underlies the Q, Fe ore-rock with
rather abrupt contact (not exposed, but
noticeable in scree gravel). Contact trends
approx. E-W.

PD 29 gneiss + pyrox. laminae &
clusters. Laminae not persistent and
locally folded, recumbent with

ex. planes sub// layering, small-scale folding. 20

layering: 75/45 M.

layering defined by pyrox. laminae and bands of light grey, whitish and medium grey rock. Whitish rocks appear to be feldspar rich.

Sample 0027, light to medium grey gneiss + pyrox. laminae & clusters.

This is most common rock at S part of Mt. A.

Sample 0028 feldsp., Q gneiss with fracture foliation. In scree, not common. Weathering selvage of brittle Q zone material. Some pale blue Q ??

Sample 0029 mica, feldsp., Q gneiss light colour. mica. Crs fracture cleavage. In scree, not common.

(P14) c/c. similar as c/c P13
layering ⁵ 00/60 M.

much small scale, isoclinal, recumbent folding

Sample 0030 typical gneiss of scree.

Sunday 5.1.1974

Walked along E spur to Mt. B.
All along spur sere & some alc of
dark brown to black ore rock with
thin banding of re glassy metallic
ore, dull ore and Q. At places
the banding is clearly isclinally
folded (small scale)

Sample 0031 folded Fe ore + Q; sere

Sample 0032 alc banded ^FFe ore rock

Sample 0033 sere; mica, Q, F, Fe ore rock

Sample 0034 sere; Q, feldsp. gneiss

Sample 0035 sere; Q, F, Fe ore rock.

(P15) alc.

approximate contact between Q, F,
Fe ore rock and pyrox, Q, feldsp.
gneiss.

345
layers: 40/10 M.

(P16) alc contact between Q, Fe ore rock
and pyrox. Q, feldsp. gneiss. At
contact the gneiss is ^{more quartzose} ~~more quartzose~~

and contains lots of banded, lenticular and pods of Q.

Sample 0036 (3x) bluish, violet Q + same Fe ore material (near East contact)

PE 122 ^{light coloured} contact gneiss and dark Q, Fe ore rock at P11

(P17) dc and scree

Q, feldsp. gneiss. + yellowish green mineral predom. on weathering surfaces; probably feldsp. Sample 0037

Much red Fe staining and rocks are fractured and cluttered by ^{irregular} Q veins, pods etc. Probably a FAULT

(P18) dc & scree, at foot of W spur of Mt. B.

dark brown to black Q, Fe-ore rock again. Higher up the spur it is overlain by the pyrox, Q, feldsp. gneiss.

General layery at Mt. B as seen from Mt. A 080/10 M.

Sample 0038 Q, F, Fe are rock with
some whitish flower; as result of
alteration??

PE3 looking E (Mt A \rightarrow Mt B)
contact rock types just below
small firm patch about $\frac{1}{3}$ from
col.

Conclusions: Q, F, Fe are rock bodies
in synclinal structure the Pyrox,
Q, feldsp gneiss at Mt. A

The Q, F, Fe are rock is ~~not~~ inter
layered between the gneiss at
Mt B with shallow dip to N

Between Mt A & B probably a major
dip slip fault.
The high spur of Mt. A follows approx
the synclinal axis.

PE425 detail photo of
band of Q, F, Fe rock at
R12

Tuesday 7.1.1974

Collected 7 samples from the summit ridge ^{& surroundings} ~~or nearby~~ nearby survey points for analysis of Fe minerals and content, and other minerals.

Sample 0039 A (2x)

B

C

D

E

F

G

outside I noticed some bluish & yellowish coloured minerals but inside tent I could not find them back. ^{especially with fluorescent light} ~~shows~~ shows pink mottling.

reddish weathered hematite

& encrustation of globular v. light green mineral. Could be malachite!

H bluish r.t.

I Q. feldsp. rock.

Samples collected from E spar, just above contact.

Sample 0040 A

B

C

D

E

F

Saturday 11.1.1975

(P19)

ok Finely laminated pyrox, Q, feldsp
gness + Q feldsp bands // laminations
laying 45° / 5-10 M. some bluish Q
Interbedded with white rock ± 100 cm to
thick
Sample 0041

(P20)

ok α -feldsp gness with
thin laminae & clusters of
pyroxene. isoclinal, small-scale,
folded. light to medium grey

Sample 0042

- one of thin to medium

PE 8201 looking W

E plunging shallow syncline

(P21)

ok dark grey pyrox, Q,
feldsp. rock
no Fe ~~mineraliz.~~ visible

altitude 5415 M.

some a. l. m. // *variegata*

light / light l. m. m. m. 2

h. m. m.

samples 43 & 0044

just above contact with
light grey gneiss

layer of 15 cm thick white

marble - felsic gneiss →

Sample 0045

altitude 5515 M.

(P22) light grey gneiss on E. of ridge
typical sample
0046 gravel

(P23) right on ridge rock is mostly
darker + a. l. m. m. m. (all gravel used)
Sample 0047
" 0048

|| Photographs of Newman colour print 66
Bob Goldsworthy CAT 516 14-24

Accuracy ± 1.0 - 2.0 mag variation
should be 40° W.

Sunday 12.1.1975

At survey station Knicker Peaks
(Main Mountain, most S. peak
and ridge to S and E)

(P24)

40m N & E from

well, irregularly layered pyrox.

foliated Q granite

Mostly composed of

with varying amounts of Q, f and

pyrox. Some layers of

Also for layer, especially

crs & finer Q

160/80-85 M

widely to closely bedded, one

250/85 M (overall layer)

various special

160/85 M \rightarrow blocky, weathering

PE 14 layer to SE seen in

int. plane. One

pyrox. with f and Q

partly of f and Q

layer (Q and f)

Weather. Colour generally

orangy brown.

PE 15. below 100 ft. only
notice dark grey ~~granite~~ ~~gneiss~~
2nd col.

Sample 0049 100 ft. pyrox. granite

Sample 0050 100 ft. typical granite

Sample 0051 100 ft. of same. layered G, pyrox
felds. ~~granite~~ gneiss. Notice lineation & layer-
ing. Study in thin section.

(P25) 100 ft. same as on top

Same as P24 but with ^{clearly spaced}
30 M. ^{open} \perp ^{cracks}
rock (not pumice but jointing)

Between 0/0's some gneiss like
cherty fracturing in red (in // layering)

A 218 ¹⁵⁵ 100 ft. ²¹⁰ / ⁸⁰⁰⁰ M.
layering

Sample 0052 100 ft. granite with typical
whitish encrustation. See also sample
of Craig Austin. Could be same
Fe salt. For analysis.

Sample 0053 ~~At~~ typical scree

Sample 0054 samples around P 25

Sample 0055 samples of etc are usually
too much weathered,

Sample 0055A o/c. dk. grey f. pyrox. gneiss of
12 cm layer intercalated with lighter green
Sample 0056 V. dk. grey pyrox. rich

granulite. Probably intercalated with
lighter coloured granulite as
at P 24.

Sample 0057 fl. leucocratic layer

with coarse feldsp. Q and Pyrox in
clusters. Rare, prob. intercalated.

Sample 0058 just below peak on ridge
to S. mostly pyrox. feldsp. to granulite (light
coloured) + some intercalated ~~prob. (biot)~~ feldsp.
Pyrox. gneiss.

(P26) A/c at S end of scree slope
of 1st (large) col. (wind gap) seen from S.

PE 16, 17 & 18

Layered sequence of coarse & fine
coarse Q f. gneiss & pyrox. gneiss
layering ¹⁵⁰205/8005 M

Integr. fracturing abt. similar to ^{at} ~~the~~ Δ
At S end of P 24, 25

dk. granulite by V. coarse
Q (rounded) diam of $1\frac{1}{2}$ cm.

100% (F) with V. coarse
less coarse pyrox (mostly
green fanny & white inclusions).
V. coarse

Sample 0058A Granulite close to contact
with (pegmat.) pyroxenite
biot. pyrox. & feldspar grains
Sample 0059 Finer ~~grains~~ ^{biot. pyrox. & feldspar grains} further from
contact and more common rock

at this place
Sample 0060 ~~Granulite~~ ^{pyrox. & feldspar grains} layer about
35 cm thick at left side of
PE 16 R17.

layer of pyroxenite:

Sample 0061 almost 100% dark to black
pyroxene

Sample 0062 pyroxenite with some
pegmatitic fibrous mineral, probably
an amphibole.

Sample 0063 pegmatitic fibrous
mineral, probably all an amphibole.

10/11/60
Sera

Sample 0064 altered pyroxene
red Fe staining, some green coating and
whitish encrustations.

Sample 0065 amphibole with
green coating.

Sample 0066 altered pyroxene
red Fe staining, slightly magnetite.

on top
22c/85

X 110/60

110/60

PE 22
PE 21

well layered sequence
near fault some
distortion of layering

see also PE low number, where
it flows into layering
from Howman.



Friday 6.1.75

(P27) slt of 5 feet of S cat
with scree at bottom
(garnet) (pyrox), Q. f. gneiss.
Layering ¹⁵⁵210/80 M,
colored by black and 2 greenish

changes: light grey
mottled ^{grey} layers with irregular
slightly disordered ^{grey} layers
up to 5-6 mm largest ^{± ferric} $\frac{1}{2}$ in \leq 100
thick) ~~and~~ between mostly light
grey to medium grey & lower
Q - f. layers
fracturing // layering locally with
shishens. ^{grey}

PE 23 layering.

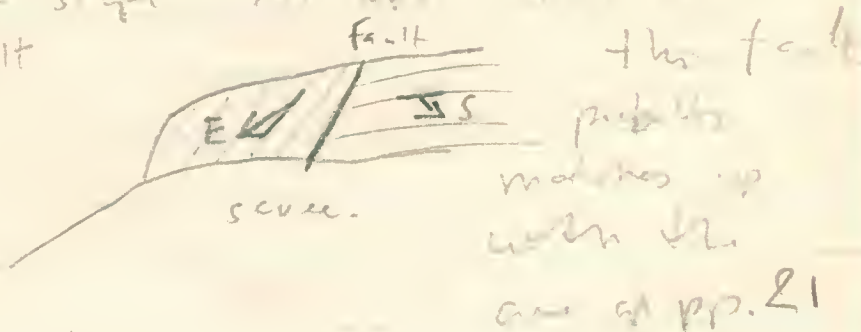
Sample 0067 A gneiss Q. f. gneiss type
0067 B same etc but less
weathered.

At other end of cat similar
gneisses, with massive appearance
dip slope there (210/80) shows garnet

Planar, smooth surfaces, parallel
to internal layering. The rocks must
break, due to weathering? Along
surfaces // layering. On

On way the 2nd col. intercalated
Q.f. gneisses but locally the
layers of and pods of dark
rocks weathered, but the rock
with greenish staining and amphibole
alteration as near contact.

PE 24825 looking S to contact
across 1st col. layered sequence +
steep slope. At last could be a
Fault



(P28) on S end 2nd col.
layering ¹⁵⁵ 210/75-80.
at other side of col similar
strike and dip. also rocks
look similar.

PE 26

finely laminated
Q. f. green

brown green

Sample
0068

part of prod. v. coarse &
finely laminated
Q. f. green. + thin bands of
brownish green

Slightly zone in core above
also irregular layer (in this case
not // to lamination) of darker
brown green.

Sample 0069 slightly red brown green
" 0069 det. thin brown laminated
green

0070 det. same

0071 det. " + brown amphib

0072 det. thin layer of

light green green

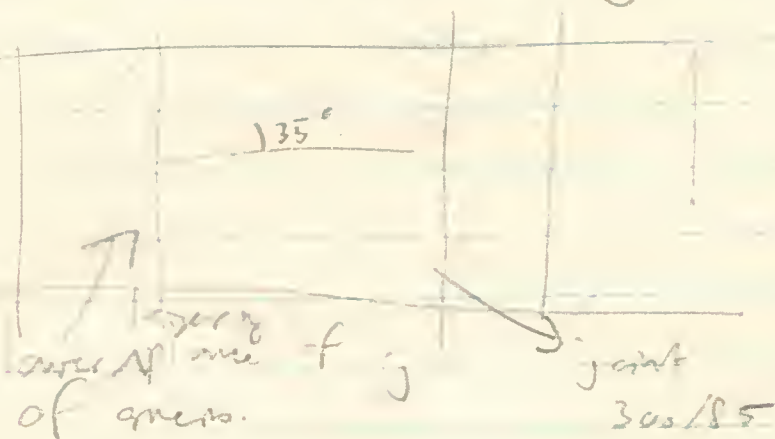
5-10 cm thick.

G. f. gneiss.

On the west side a complete
at foot of cliff just S
of scree of m. a. S. col.
micaceous rock with light blue
green staining. float close to present
dip. Sills. Sample 0013

Brit. (pyroxene) + Fe, Ca oxide + silicate +

On lower part of the gneiss
just above scree slope
well developed kitchen & day.



bearing to Dogoon Nunataks

123° Rg Variation is 58

True bearing is $\begin{array}{r} 123 \\ - 58 \\ \hline 65 \end{array}$

It should be 76° True. so there is here an magnetic anomaly.

	M	True	Var	↓	M or
July 27		343	58	329	14
August 14		102	58	84	18
Dogoon 123		79	58	65	14
Star 85		40	55	22	18.

$\begin{array}{r} 123 \\ - 58 \\ \hline 65 \end{array}$ $\begin{array}{r} 123 \\ - 58 \\ \hline 65 \end{array}$

$\begin{array}{r} 7 \\ 1 \\ 5 \\ \hline 22 \end{array}$

Friday 16. 1. 75

On the way to Mt Cook
Leckie Ra.

Mt Channon

Layering: 250-260 / PE 27
M. Channon + Dismal Mts.
M. all over
80-85

Mt. of Cyclop Peaks.

layering: 240/85-65.



↑ looking to S.
Most S. large Mt. could have
sharp syncline. axis trending 160°.

Mt Cook

regional layering 225/60-70.

PE 28 & 29 to 32 Approach

Mt Cook from E.

and layering; fault with flexing
of layers.

Sample 121975

Twinkl Mt. clay front in

Mabua - PCM.

clashed to W. Fr ²⁸⁵

a general layer 350/60-70 M.

Thick dark layer of ~~pyrox.~~

feldsp. pyrox. green at

E peak near col. see

P F 28-30?

alt. seta

Sample 0074

ch. charnockite scra

Sample 0075

medium gr. charnock

with whitish ancient
dikes.

Sample 0076

charnock with
pyrox. rich banded
layer.

Sample 0077

banded pyrox. &
feldsp. green.

Sample 0078

black G

Sample 0079

felds. pyrox. green

From ~~distal~~ rocks of old ²⁵ and
also from Bron. Rg. took the ~~distal~~

to dark brown
Mud is smoothly uniform
and lots of some gravel in it
in some places where no oil
has been.

Brown bit and Mud. Adams
are much more rugged and
jagged.

Spent time
from 2:10 PM

// to stop

July 31, 32, 1975
Masson Range, Rhinoceros.

PG 28228 Rhinoceros etc area +
metalliferous

PG 29 charnockite breccia

Sample 008 some charnockite breccia
+ black (large) rock fragments.

just in front of highest snow slope

of PG 28229. (right of hill)
Sample 008 charnockite + whitish
encrustations. (see)

Traced line of metalliferous clastic
material and breccia, showing
prior felsic gneiss.

The composition is very unlike
any other local breccia of Q
(approx 5 km. lower down).

Sample 0081

Left and center right hand
are metalliferous and before
some large clastic material
charnockite. Very much
vertical trending 240° M.

rock appears to be very homogeneous
with medium & coarse grained.

Sample 0082

near met-lath & left wall
below sea cut See PG 32

mostly brownish chlorite
with minor mesular bands
(not persistent) of black
feldsp, pyrox. grains, which
are subparallel to foliation
(05/85-gr M)

Also lenses and veins & pods
of black Q sub// foliation.

Sample 0083 coarse chlorite
0084 medium chlorite

Sample 0085 pyrox. feldsp. grains
+ Q. ~~feldsp.~~ pyrox. + f. + minor
dark rock

Samples 0087-90 } relatively
Samples 0091-95 } rare, only in

At the west (more N) rock
primary occurs better layered
rock of light ~~and~~ brown and
dark brown to black colour

see PG 34

G+Latitude ¹⁵ 50/85 M

other recording ³⁵⁵ 52-60/85-85

DH 4 or 6 Davies Ra
beds ¹⁰ 10/10 from H to S
apparently dark brown ^{homogen} ~~beds~~
overlying lighter colored beds
7 or 8

*Claim for Hazardous Flyng
Allawana & Traverse
Allawana. Ken Vassil
National Marbury, Melbourne

Aph. ⁵⁸ Mt. Biscoe - W. King Edw Gulf

R 12, 7212 L (21)

structure Mts Griffith (Bride)

dip slope Mt. Bennett E/40-45 T

Aph. Amundsen Bay - Mt. Biscoe R 3b

9102 R (38)

well layered sequence of dark and light

coloured metamorphic dipping SSW/30-40 T

Mt Riiser-Larsen.

Aph. Leckie R - Amundsen Bay R 10

7238 L (49)

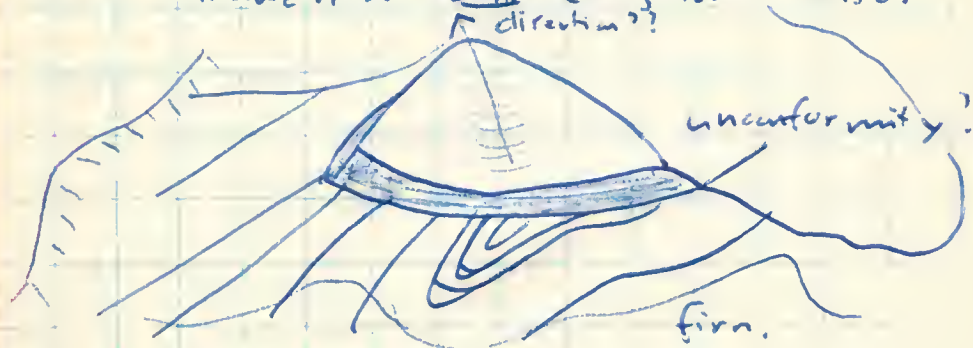
dip slope of Mt. Pardee SW-SSW/30-40

General Notes:

APh(29)Horseasen Glac - Hansen Mt.

Rim 2H (9005-9184) Mo. R9023

Shows Mt. King & Seavers Ridge
with large ~~isoclinal~~ ^{isoclinal} ~~synclinal~~ ^{synclinal} in
inbanded rocks which is cut off at
top of ridge by a slab of
darker colored rock in form of
truncated ~~dis~~ elongated disc.



Mnt. Paide & Mnt. Griffiths in partic.
are ridge like structures with relatively
flat tops (summit ridges), like Pietus
Mountain. We should check out these
structures.

see APh. Mt. Biscoe - Horseasen Glac. R 15
7007 (L) (20)



